Amendments to the Claims

This listing of claims replaces all prior versions, and listings, of claims in the above-identified application:

1.   (currently amended) A method to detect a physiological state of a person, the method comprising:

providing thermal image data of at least a region of a face of a person, wherein providing the thermal image data comprises providing thermal image data of at least a periorbital region of an eye of the person representative of blood flow to at least eye musculature in the periorbital region; and

using the thermal image data to determine a physiological state of the person.

2.   (previously presented) The method of claim 1, wherein using the thermal image data comprises using the thermal image data to determine anxiety in the person.

3.   (canceled)

4.   (previously presented) The method of claim 2, wherein using the thermal image data comprises detecting a change, over a plurality of frames, in the thermal image data when the person is experiencing anxiety.

5.   (currently amended) The method of claim 1, wherein providing the thermal image data comprises providing thermal image data of at least the periorbital region of the eye of the person and of another region of the face, and further wherein using the thermal image data to determine the physiological state of the person comprises comparing the thermal image data of the periorbital region of the eye of the person to thermal data of the other region of the face.

6.   (previously presented) The method of claim 5, wherein the other region of the face comprises a cheek region of the face.

7.   (previously presented) The method of claim 1, wherein using the thermal image data comprises comparing the thermal image data to a baseline reference.

8.   (previously presented) The method of claim 1, wherein providing the thermal image data comprises providing mid-infrared thermal image data of the at least one region of the face and far-infrared thermal image data of the least one region of the face.

9.   (original) The method of claim 1, wherein providing thermal image data of at least a region of a face of a person comprises:

providing thermal image data of a scene; and

selecting thermal image data of the face of the person from the thermal image of the scene.

10.   (original) The method of claim 1, wherein providing thermal image data of at least a region of a face of a person comprises:

providing thermal image data of a face of the person; and

identifying thermal image data for one or more regions of the face based on at least bilateral symmetry of the thermal image data of the face.

11.   (currently amended) A detection system to detect a physiological state of a person, the system comprising:

a thermal infrared image device operable to provide thermal image data of at least a region of a face of a person, wherein the region of the face comprises at least a periorbital region

of an eye of the person <u>representative of blood flow to at least eye musculature in the periorbital region</u>; and

circuitry operable upon the thermal image data to determine a physiological state of the person.

12.   (original) The system of claim 11, wherein the circuitry is operable upon the thermal image data to determine the presence of anxiety in the person.

13.   (canceled)

14.   (previously presented) The system of claim 12, wherein the circuitry is operable to detect a change, over a plurality of frames, in the thermal image data when the person is experiencing anxiety.

15.   (currently amended) The system of claim 11, wherein the thermal infrared image device is operable to provide thermal image data of at least the periorbital region <u>of the eye of the person</u> and of another region of the face, and further wherein the circuitry is operable to compare the thermal image data of the periorbital region <u>of the eye of the person</u> to the thermal image data of the other region of the face.

16.   (previously presented) The system of claim 15, wherein the other region of the face comprises a cheek region of the face.

17.   (original) The system of claim 11, wherein the circuitry is operable to compare the thermal image data to a baseline reference.

18.   (previously presented) The system of claim 11, wherein the thermal infrared image device

is operable to provide mid-infrared thermal image data of the at least one region of the face and far-infrared thermal image data of the least one region of the face.

19.   (original) The system of claim 11, wherein the thermal infrared image device is operable to provide thermal image data of a scene and to select thermal image data of the face of the person from the thermal image of the scene.

20.   (original) The system of claim 11, wherein the thermal infrared image device is operable to provide thermal image data of a face of the person and to identify thermal image data for one or more regions of the face based on at least bilateral symmetry of the thermal image data of the face.